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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/736,294	12/15/2000	Santo Maggio	Q62156	8429

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EXAMINER

VARTANIAN, HARRY

ART UNIT	PAPER NUMBER
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2634

DATE MAILED: 08/23/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/736,294

Applicant(s)

MAGGIO ET AL.

Examiner

Harry Vartanian

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 May 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19 is/are allowed.
- 6) ☒ Claim(s) 1, 11, 13, 14, 16, 20 and 21 is/are rejected.
- 7) ☒ Claim(s) 3-10, 12, 15, 17 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**Detailed Action**

***Claim Objections***

1. Claim 1 recites the limitation "said recovered clock signal generation ". There is insufficient antecedent basis for this limitation in the claim. A suggested change would be to "a recovered clock signal generation".

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 20-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 20-21 recite the limitation "said control logic" in line 1. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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1. Claims 1, 11, 13-14, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Ozkan(US Patent# 5488641). Regarding Claim 1, Ozkan meets the following limitations:

comparing the input data signal with a recovered clock signal in order to control said recovered clock signal generation; and **(Column 2, Lines 38-43)**

generating a plurality of delayed clock signals, obtained by multi-delaying at least a reference signal, said delayed clock signals being phase-shifted with respect to each other; **(Column 2, Lines 52-66)**

selecting the recovered clock signal among said delayed clock signals; and **(Column 4, Lines 3-10)**

employing a number of delayed signals, such that the sum of the shifts associated with such delayed signals covers the bit period of the input data signal; **In Abstract see "360 degrees phase shift"; (Column 5, Lines 8-13)**

wherein said delayed clock signals show a phase shift with respect to each other, that is nominally constant in time, wherein said delayed clock signals show a phase shift with respect to each other, that is nominally constant in time. **(Column 1, Line 63; Column 2, Line 6); (Column 4, Lines 15-26)**

Regarding Claim 11, Ozkan meets the following limitations:

further comprising comparing the input data signal with the recovered clock signal, **(Column 2, Lines 38-51)**

by using the comparison of several phases of at least one of the input data signal and the recovered clock signal, so as to obtain a plurality of samples for each sampling cycle. **(Column 3, Lines 57 to Column 4, Line 15)**

Regarding Claim 13, Ozkan meets the following limitations:

a generating means configured to generate a recovery clock signal; and a phase comparator configured to compare the input data signal phase and the recovery clock signal phase for supplying a phase information, which controls said generating means of said recovery clock signal; **(Column 2, Lines 38-43)**

wherein said generating means further comprises a delay line having a plurality of taps for generating a plurality of delayed signals, and **fig 2; (Column 2, Lines 52-66)**

wherein the sum of the shifts associated with such delayed signals covers the bit period of the input data signal. **In Abstract see "360 degrees phase shift"; (Column 5, Lines 8-13)**

Regarding Claim 14, Ozkan meets the following limitations:

wherein said generating means comprises a selection means of the recovered clock signal. **(Column 4, Lines 3-10)**

Regarding Claim 16, Ozkan meets the following limitations:

wherein said selection means further comprises a control logic driving a selection block and a switch block according to the phase information supplied by the phase comparator. **Fig 5**

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***Allowable Subject Matter***

2. Claims 19 is allowed.
3. Claim 3-10, 12, 15, and 17-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harry Vartanian whose telephone number is 703.305.8698. The examiner can normally be reached on 10:00-6:30 Mondays to Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703.305.4714. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Harry Vartanian  
Examiner  
Art Unit 2634

HV

  
**STEPHEN CHIN**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2800**